Lot 6—Field 1

FIELD WORKSHEET #1
GENERAL FORESTRY INFORMATION

Lot # 6 **Total Acres:** 100 **Field Number(s):** 1 **Acres:** 38 **Date:** 8/13/03

Reported By: Earth Spirit Educational Services, Inc.

Principal Species	DBH* (inches)	Density (Heavy, Medium, Light)	Growth Rate**	Age Class (Even/Mult.)	Age	Heights (feet) Crown/Usable		Condition (Good, Fair, Poor)
Sugar Maple	P-18	Heavy	19	Multiple		75	36	Good
American Beech	P-16	Heavy	16	Multiple		68	32	Good
White Ash	P-13	Heavy	14	Multiple		72	38	Good

* "S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions
** Represents the most recent growth rings per inch from a core sample

Comments
This field represents a middle age - mature mixed Hardwood Forest dominated by Sugar Maple (Acer saccharum), American Beech (Fagus grandifolia) and White Ash (Fraxinus americana). Additional hardwood species also include Black Cherry (Prunus serotina), Basswood (Tilia americana) and Bitternut Hickory (Carya cordiformis). Note: Hardwoods have been illegally harvested in past years and there is evidence of hunting on the property. Timber Trespass is prohibited by law and hunting is also prohibited on County Forest property; violators will be prosecuted.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems
None

Fire Lane Status
The Fire Break in this field follows the property border and is generally in poor condition. Significant clearing, widening and pruning would be necessary to restore this Fire Break.

Lot 6—Field 1

FIELD WORKSHEET #2
ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy
The canopy is of medium density and is characterized by Sugar Maple (Acer saccharum), American Beech (Fagus grandifolia) and White Ash (Fraxinus americana).

Subcanopy
The subcanopy is of heavy density and is represented by a variety of hardwood species.

Shrub Layer
The shrub layer is of medium density and is generally dominated by a variety of Brambles (Rubus spp.)

Herbaceous Layer
The herbaceous layer is of heavy density and is dominated by a variety of ferns such as Evergreen Woodfern (Dryopteris intermedia) and Christmas fern (Polystichum acrostichoides) as well as scattered herbs.

Successional Status

This field represents a middle aged - mature mixed Hardwood Forest that will evolve into a mature Maple/Beech Climax Forest.

Botanical Concerns - includes both invasive and protected species

Invasive: None
Protected: Evergreen Woodfern (Dryopteris intermedia) and Christmas fern (Polystichum acrostichoides).

Lot 6—Field 2

FIELD WORKSHEET #1
GENERAL FORESTRY INFORMATION

Lot # 6 **Total Acres:** 100 **Field Number(s):** 2 **Acres:** 24 **Date:** 8/13/03

Reported By: Earth Spirit Educational Services, Inc.

Principal Species	DBH* (inches)	Density (Heavy, Medium, Light)	Growth Rate**	Age Class (Even/Mult.)	Age	Heights (feet) Crown/Usable	Condition (Good, Fair, Poor)
Red Pine	P-14	Heavy	23	Even	73	70	Good
Sugar Maple	S/P	Medium - Heavy		Multiple			Poor
White Ash	S/P	Medium		Multiple			Poor
Black Cherry	S/P	Light		Multiple			Poor

* "S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions
** Represents the most recent growth rings per inch from a core sample

Comments
This field represents a mature Red Pine (Pinus resinosa) Plantation with significant hardwood intrusions that exist in all forest levels. Accessibility through this field is good and as a result of a moderate canopy and some mature hardwoods, seedling growth is heavy. The terrain is generally steep throughout this field.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems
None

Fire Lane Status
The Fire Break in this field continues to follow the property border from Field Number 1 as it eventually connects to East Holland Road. Significant clearing, widening and pruning would be necessary to restore this Fire Break. The section of Fire Break from East Holland Road heading northward up a steep slope is in particularly poor condition.

Lot 6—Field 2

FIELD WORKSHEET #2
ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy

The canopy is of medium density and is characterized by Red Pine (Pinus resinosa) along with a significant intrusion of hardwoods such as Sugar Maple (Acer saccharum), White Ash (Fraxinus americana) and Black Cherry (Prunus serotina).

Subcanopy

The subcanopy is of heavy density and is represented by a variety of hardwood species such as Sugar Maple (Acer saccharum), White Ash (Fraxinus americana), Black Cherry (Prunus serotina), American Beech (Fagus americana) and Witch Hazel (Hamamelis virginiana).

Shrub Layer

The shrub layer is of light density and includes Brambles (Rubus spp.), Hawthorns (Crataegus spp.) and Gooseberries (Ribes spp.).

Herbaceous Layer

The herbaceous layer is of medium density and is dominated by a variety of ferns such as Evergreen Woodfern (Dryopteris intermedia) and Christmas fern (Polystichum acrostichoides) along with scattered herbs.

Successional Status

This field represents a mature Red Pine (Pinus resinosa) Plantation in the mid - late stages of hardwood succession. In time, the Pines will continue to decline as the hardwoods become more dominant.

Botanical Concerns - includes both invasive and protected species

Invasive: None

Protected: Evergreen Woodfern (Dryopteris intermedia) and Christmas fern (Polystichum acrostichoides).

Lot 6—Field 3

FIELD WORKSHEET #1
GENERAL FORESTRY INFORMATION

Lot # 6 **Total Acres:** 100 **Field Number(s):** 3 **Acres:** 38 **Date:** 8/13/03

Reported By: Earth Spirit Educational Services, Inc.

Principal Species	DBH* (inches)	Density (Heavy, Medium, Light)	Growth Rate**	Age Class (Even/Mult.)	Age	Heights (feet) Crown/Usable	Condition (Good, Fair, Poor)
Red Pine	P-12	Heavy	26	Even	73	73	Good
Norway Spruce	P-20	Heavy	27	Even	73	78	Good

* "S" refers to saplings, "P" refers to pole size dimensions, "SL" refers to saw log dimensions
** Represents the most recent growth rings per inch from a core sample

Comments
This field represents a mature Conifer Plantation of Red Pine (Pinus resinosa) and Norway Spruce (Picea abies) with a marginal intrusion of hardwoods. Accessibility through this field is generally poor and the terrain is steep. Edge communities along Buffalo Creek are "open" and are characterized by dense herbaceous growth, shrubs and pioneer species.

Aquatic Systems – includes both lentic (standing water) and lotic (flowing water) systems
This field contains Buffalo Creek, a major four season stream that crosses Wyoming and Erie Counties.

Fire Lane Status
None

Lot 6—Field 3

FIELD WORKSHEET #2
ECOLOGICAL ANALYSIS

Ecological Overview

Forest Physiognomy (outer appearance)

Canopy

The canopy is of heavy density and is characterized by Red Pine (Pinus resinosa) and Norway Spruce (Picea abies) along with a light intrusion of hardwood species such as Sugar Maple (Acer saccharum) and American Elm (Ulmus americana).

Subcanopy

The subcanopy is of very light density and is represented by a variety of hardwood species such as Sugar Maple (Acer saccharum), Black Cherry (Prunus serotina) and White Ash (Fraxinus americana).

Shrub Layer

The shrub layer is generally not present except along edges that border Buffalo Creek and East Holland Road.

Herbaceous Layer

The herbaceous layer is of light density and is dominated by a variety of ferns such as Evergreen Woodfern (Dryopteris intermedia), Ostrich fern (Matteuccia struthiopteris), Sensitive fern (Onoclea sensibilis) and Lady fern (Athyrium Filix-femina) as well as some scattered herbs.

Successional Status

This field represents a mature Conifer Plantation in the early stages of hardwood succession.

Botanical Concerns - includes both invasive and protected species

Invasive: None

Protected: All ferns listed under "Herbaceous Layer" except Sensitive fern (Onoclea sensibilis). Helleborine (Epipactis helleborine), a forest Orchid, is also protected.

Lot 6 Summary and Recommendations

FIELD WORKSHEET #3
WILDLIFE SUMMARY

Lot # 6 offers a good variety of habitats for diverse populations of wildlife. Field Number 1 possesses a middle aged - mature Hardwood Forest that provides a wide range of food and cover for local wildlife. Field Numbers 2 and 3 represent mature Conifer Plantations in various stages of hardwood succession. Field Number 3 also contains Buffalo Creek, a major four season stream as well as "open" Field/Shrubland Communities that border the creek.

During a one day field analysis, staff ecologists recorded a variety of wildlife observations based upon actual sightings and other wildlife "signs". The following list represents a brief overview of those encounters focused upon Mammals, Birds and Reptiles/Amphibians.

Mammals

Whitetail Deer (Odocoileus virginianus)
Gray Squirrel (Sciurus carolinensis)
Red Squirrel (Tamiasciurus hudsonicus)
Red Fox (Vulpes fulva)
Raccoon (Procyon lotor)
Eastern Chipmunk (Tamias striatus)

Birds

Black-capped Chickadee (Parus atricapillus)
Common Crow (Corvus brachyrhynchos)
Eastern Phoebe (Sayornis phoebe)
White-breasted Nuthatch (Sitta carolinensis)
Red-eyed Vireo (Vireo olivaceus)
American Goldfinch (Carduelis tristis)

Reptiles/Amphibians

Dusky Salamander (Desmognathus fuscus)
Green Frog (Rana clamitans melanota)
Wood Frog (Rana sylvatica)
American Toad (Bufo americanus)

FIELD WORKSHEET #4
RECOMMENDATIONS

The following recommendations for Lot #6 of the Erie County Forestry Management Plan are based upon field data collected by Earth Spirit Educational Services, Inc. in the areas of Forest Ecology, Wildlife Biology and general Ecology.

Field Number 1

Description - This field represents a middle aged - mature mixed Hardwood Forest characterized by Sugar Maple (Acer saccharum), American Beech (Fagus grandifolia) and White Ash (Fraxinus americana).
Recommendations – This field represents an excellent opportunity for the selective management of hardwood species.

Field Number 2 & 3

Description - These fields represent mature Conifer Plantations with medium hardwood intrusions. The terrain in these fields is generally steep with run-off draining directly into Buffalo Creek.
Recommendations – These fields should remain without treatment in order to provide erosion control, watershed protection and wildlife habitat.

Lot 6
Soils, Waterways and Topography

Soils
The predominate soil type on Lot 6 is the well drained, highly erodible Hudson Silty Clay Loam (HvE), with 25-40% slopes and moderate to slow permeability. Along Buffalo Creek, which flows northeasterly along East Holland Road, lie the poorly drained, hydric Canadice Silt Loam (Ca), somewhat poorly drained, potentially highly erodible Rhinebeck Silt Loam (RgB), 3-8% slopes, and moderate to somewhat poorly well drained Middlebury Silt Loam (Mg). These soils have slow to moderate permeability.

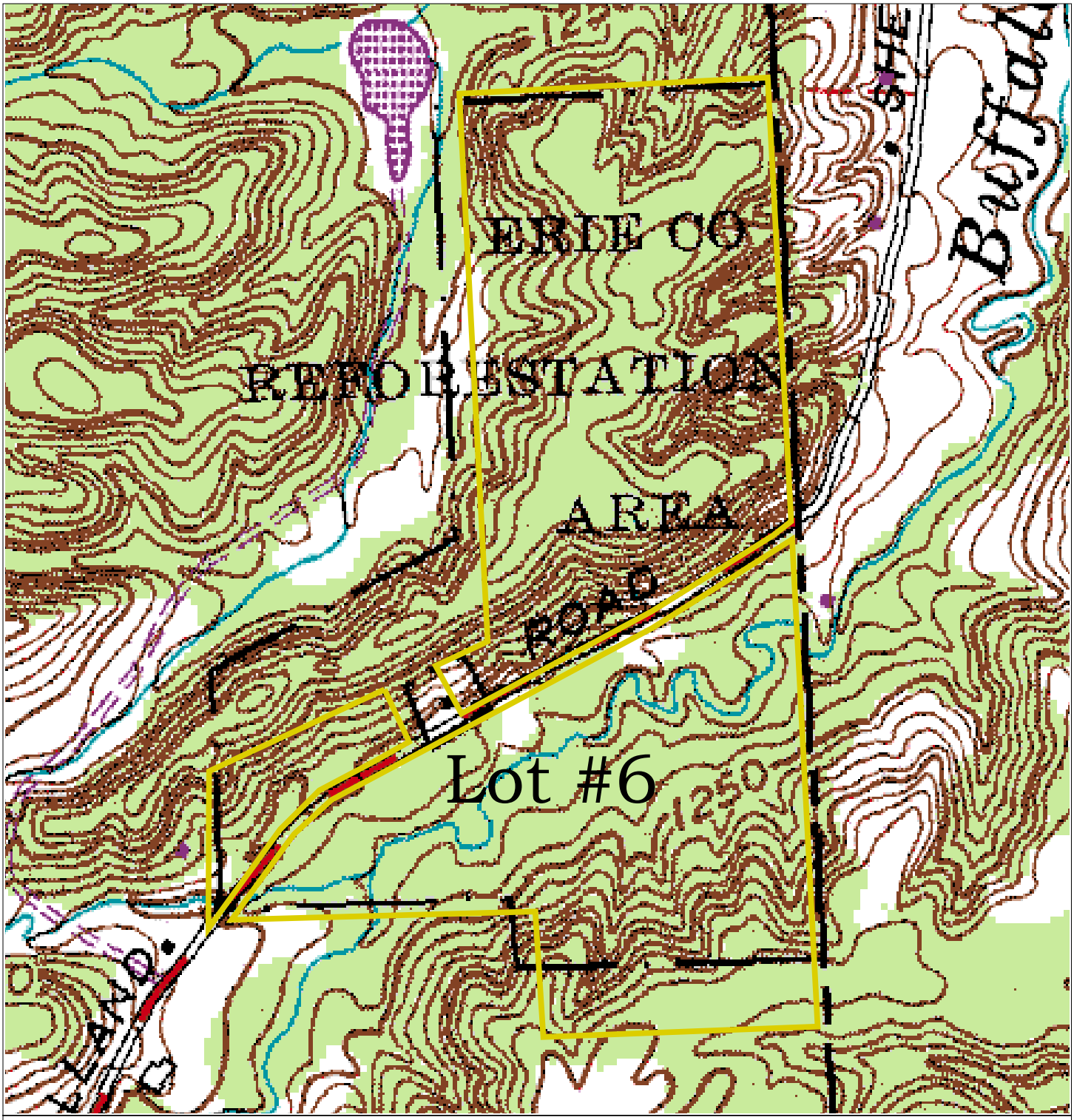
Waterways and Topography
Lot 6 is steeply sloped toward Buffalo Creek from both the north and south, culminating in a wide floodplain on both streambanks. Proper forest management practices should be utilized to prevent or minimize soil erosion and the introduction of sediment into Buffalo Creek, to protect the impaired Class A stream from further degradation. Pollutants in Buffalo Creek include thermal changes, nutrients, pathogens, pesticides, silt, chlorine and water level; from agriculture, on-site waste treatment, construction, streambank erosion, urban runoff and road bank erosion. A forested buffer along the streambanks and steep slopes should be maintained.

Lot 6
Forest Stewardship Recommendations

Stand A (Field 1) **MEDIUM PRIORITY**
This is an uneven-aged stand of northern hardwoods containing mature sugar maples, beech and ash. This large pole / small sawtimber stand should be thinned to reduce the number of low value / high risk trees. Boundary lines should be surveyed, painted and posted to help identify County property for the execution of County management activities and for the prevention and/or prosecution of timber trespass. Recheck 10 years after treatment.

Stand B (Fields 2, 3) **LOW PRIORITY**
This is an area of mature conifer plantations including red pine and Norway spruce. Because of the steep terrain and riparian location, typical harvest for conversion to hardwoods is not recommended. Consider only a low, non-commercial thin to develop the hardwood understory and to help prevent residual windthrow. Allow at least 100-200 feet of a no-cut buffer along the road and another buffer along Buffalo Creek. Recheck 10 years after treatment.

General
Best Management Practices (BMPs) for erosion control should be followed on the fire lanes used as trails. Some erosion can occur on the steeper slopes. Reference the BMP Field Guide pages 54 - 65. Buffalo Creek is a NYS Protected Stream with Classification ‘A’. Under this classification, vehicles, especially logging equipment, must have a DEC permit for crossing. Tops and debris must not be left in the creek, and an adequate buffer must left between skid trails and the stream.



Erie County Forest Management Plan

USGS Topographic Quadrangle

Map Prepared By:
Erie County Soil and Water Conservation District

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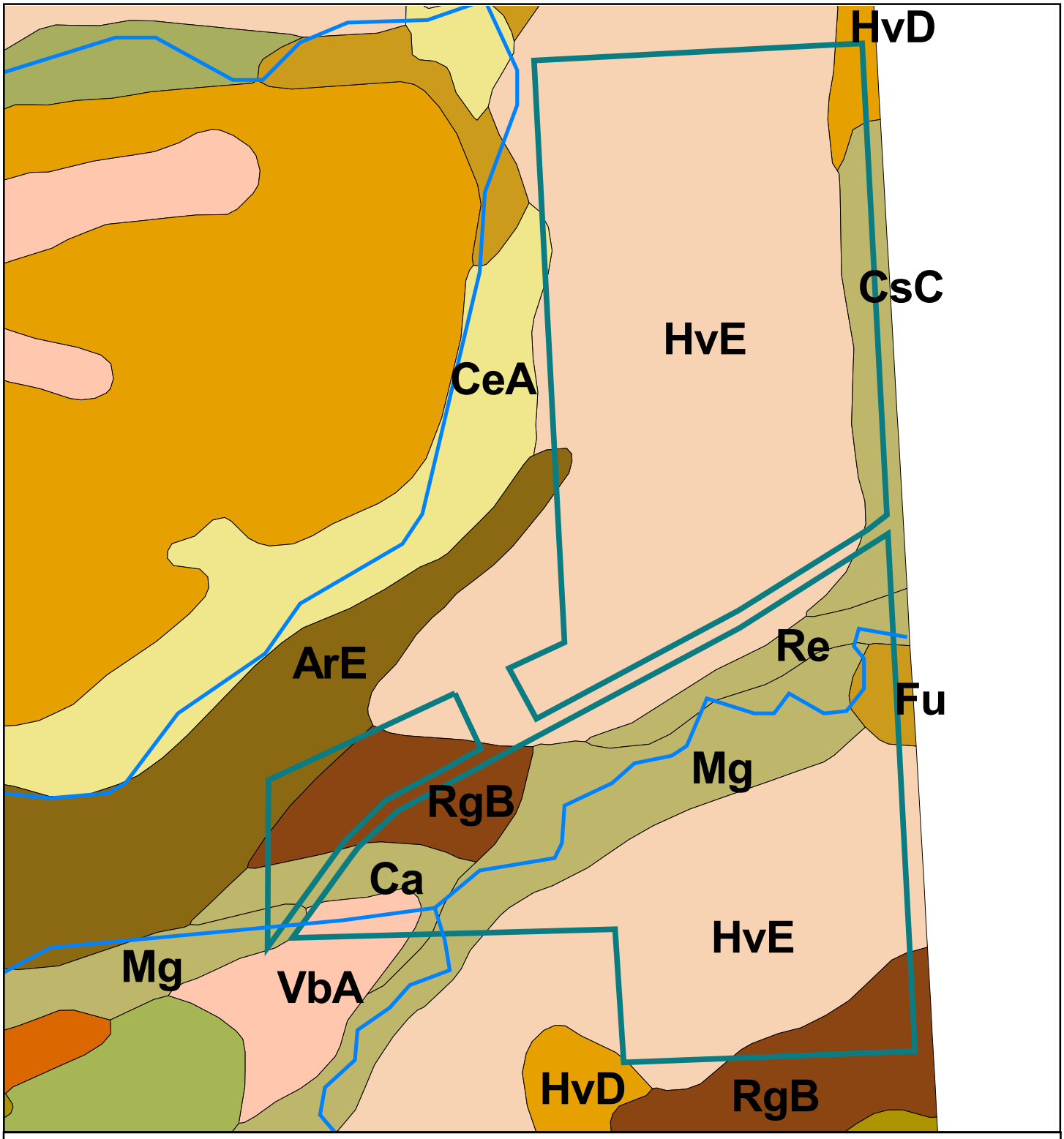

Erie County Forest Management Plan

Lot #6 - Soil Types

Map Prepared By:
Erie County Soil and Water Conservation District

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Erie County Soil and Water Conservation District & USDA Natural Resources Conservation Service

Brief Soil Descriptions – Lot 6

For further information refer to the *Soil Survey of Erie County, New York*.

Symbol **Name / Description**

ArE Arkport Very Fine Sandy Loam, 25 to 40 Percent Slopes

Deep, very steep, well drained, medium lime, sandy soil formed in coarse loamy deposits dominated by fine and very fine sand. The available water capacity is moderate. Permeability is moderately rapid. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-VIe, NYS SOIL GROUP-8b, K=.28, T=3

Ca Candice Silt Loam

Deep, nearly level, poorly drained, low lime soil formed in slight depressions of old glacial lake basins. Parent material consists of lake sediments having a high clay content, underlain by calcareous, shaly glacial till. Available water capacity is moderate to high. Permeability is moderate to slow in the surface layer and very slow in the subsoil and substratum. HYDRIC SOIL, CAPABILITY CLASS-IVw, NYS SOIL GROUP-6b, K=.49, T=3

CeA Castile Gravelly Loam, 0 to 3 Percent Slopes

Deep, nearly level, moderately well drained, low lime, gravelly loam soil formed mainly in gravel and sand deposits. The available water capacity is low to moderate. Permeability is generally rapid. PRIME FARMLAND, CAPABILITY CLASS-IIw, NYS SOIL GROUP-2b, K=.24, T=3

CsC Collamer Silt Loam, 8 to 15 Percent Slopes

Deep, sloping, moderately well drained, high lime, silty soil formed mainly in silt and very fine sandy lake sediments. The available water capacity is high. Permeability is moderately slow. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIIe, NYS SOIL GROUP-5b, K=.49, T=3

Fu Fluvaquents and Udifluvents, Frequently Flooded

Moderately deep to deep, nearly level, well drained to poorly drained, high to low lime, variable soils formed in recent stream deposits. The available water capacity and permeability are variable. No K or T values are assigned. HYDRIC SOIL, CAPABILITY CLASS-Vw, NYS SOIL GROUP-9

HvD Hudson Silty Clay Loam, 15 to 25 Percent Slopes

Deep, moderately steep, well drained, high lime, silt loam soil formed in clayey glacial lake sediments. The available water capacity is moderate to high. Permeability is moderate to slow in the surface and subsoil layers and slow to very slow in the underlying layers. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IVe, NYS SOIL GROUP-7b, K=.49, T=3

HvE Hudson Silty Clay Loam, 25 to 40 Percent Slopes

Deep, very steep, well drained, high lime, silt loam soil formed in clayey glacial lake sediments. The available water capacity is moderate to high. Permeability is moderate to slow in the surface and subsoil layers and slow to very slow in the underlying layers. HIGHLY ERODIBLE LAND, CAPABILITY CLASS-VIe, NYS SOIL GROUP-9b, K=.49, T=3

Mg Middlebury Silt Loam

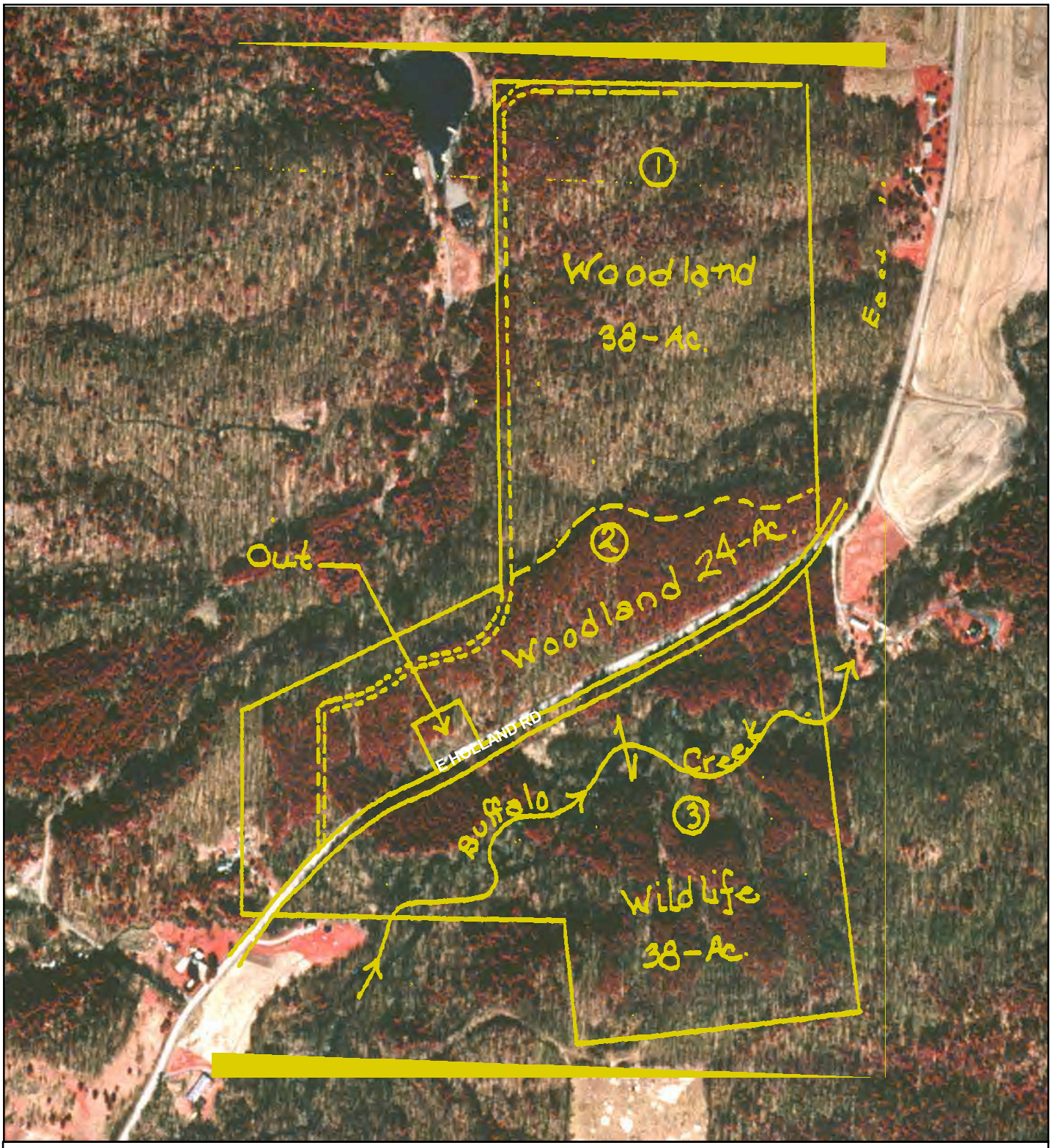
Deep, nearly level, moderately well drained to somewhat poorly drained, medium lime, silt loam soil formed in stream deposits. The available water capacity is high. Permeability is moderate. PRIME FARMLAND, CAPABILITY CLASS-IIw, NYS SOIL GROUP-2b, K=.49, T=3

RgB Rhinebeck Silt Loam, 3 to 8 Percent Slopes

Deep, gently sloping, somewhat poorly drained, medium to high lime, silt loam soil formed in clayey lake sediments. The available water capacity is moderate to high. Permeability is very slow. PRIME FARMLAND (WHERE DRAINED), POTENTIALLY HIGHLY ERODIBLE LAND, CAPABILITY CLASS-IIIw, NYS SOIL GROUP-5b, K=.49, T=3

VpA Volusia Channery Silt Loam, 0 to 3 Percent Slopes

Deep, nearly level, somewhat poorly drained, low lime, channery silt loam soil formed in fine loamy glacial till. It has a very firm fragipan at a depth of 15 to 50 inches. The available water capacity is moderate to low. Permeability is generally moderate above the fragipan and slow to very slow in the fragipan. CAPABILITY CLASS-IIIw, NYS SOIL GROUP-6b, K=.24, T=3



1965 Conservation Plan Map

Lot #6

Erie County
Forest Management Plan

Map Prepared By:
Erie County Soil and Water
Conservation District

* Basemap Source: 1995 Color IR Orthophotography

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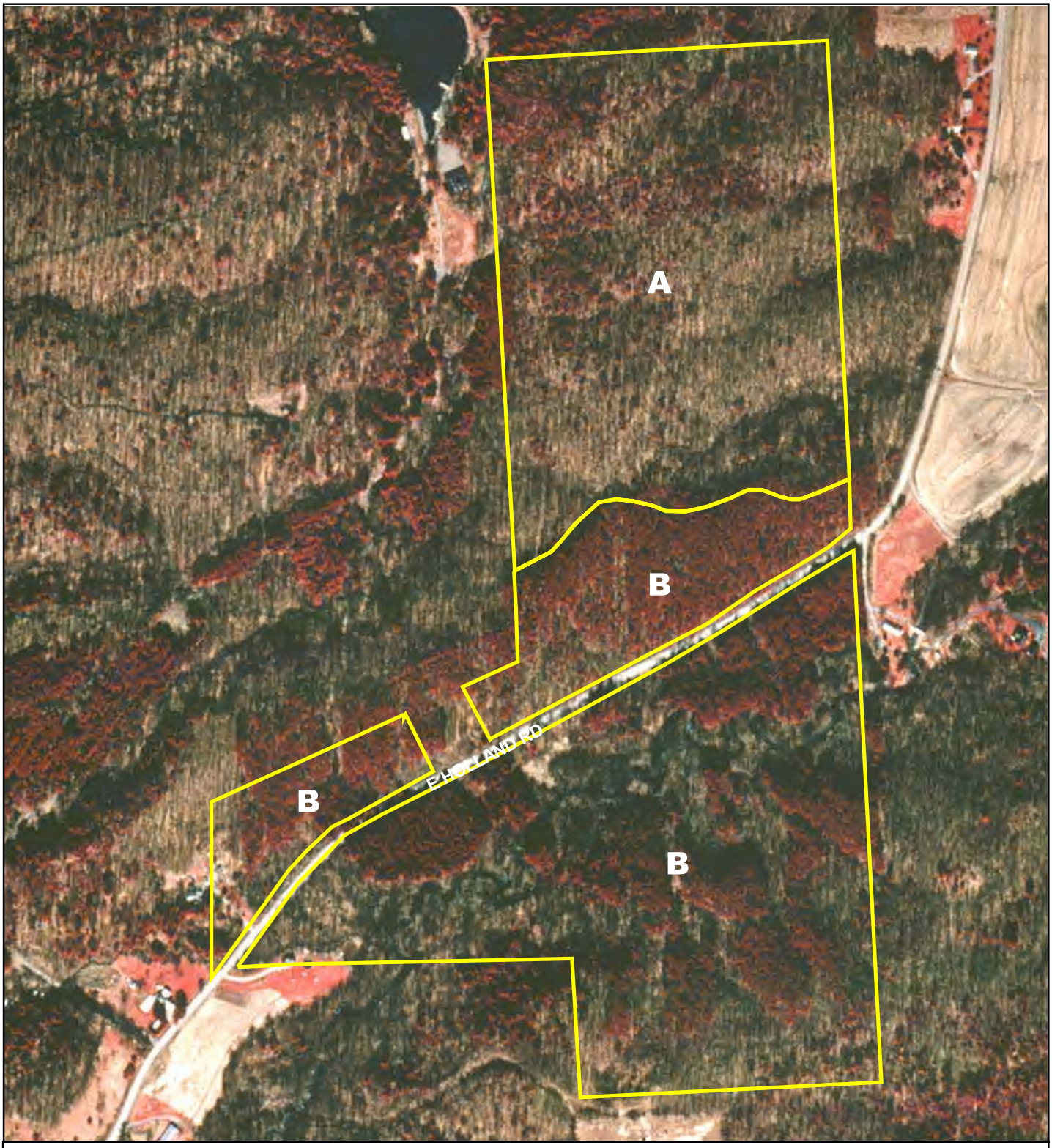

2003 Stewardship Recommendation Map

Erie County
Forest Management Plan

Lot #6

Map Prepared By:
Erie County Soil and Water
Conservation District

* Basemap Source: 1995 Color IR Orthophotography

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